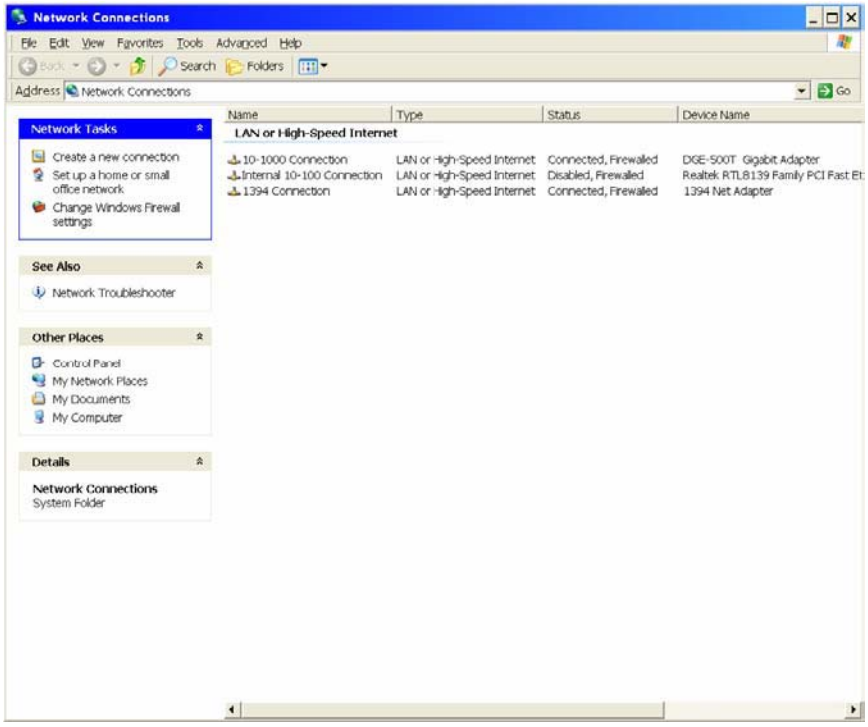
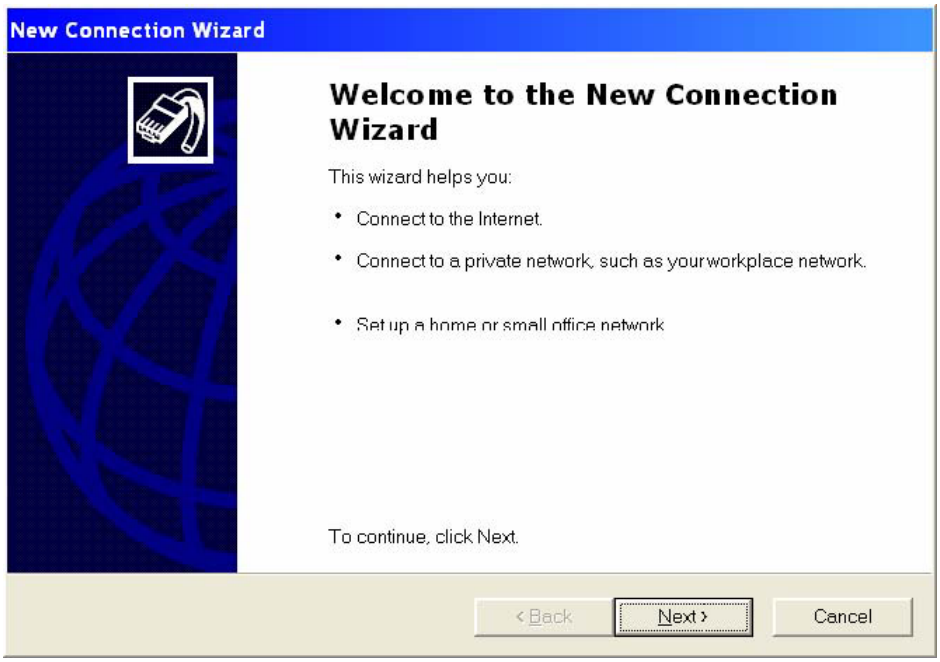
Windows XP Virtual Private Network Connection Setup Instructions

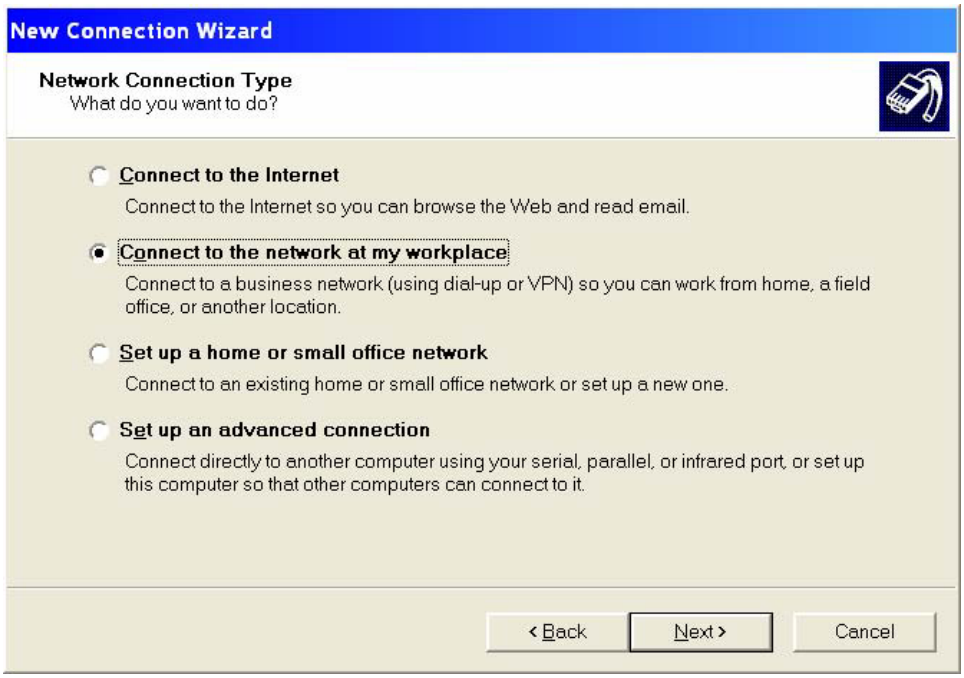
Find your " My Network Places " icon on your desktop or in your control panel under " Network and Internet Connections " By default, this is NOT on your desktop.
Once you find either the Icon or the listing:
Right click on "My Network Places"
Left Click on "Properties"
This window will open.



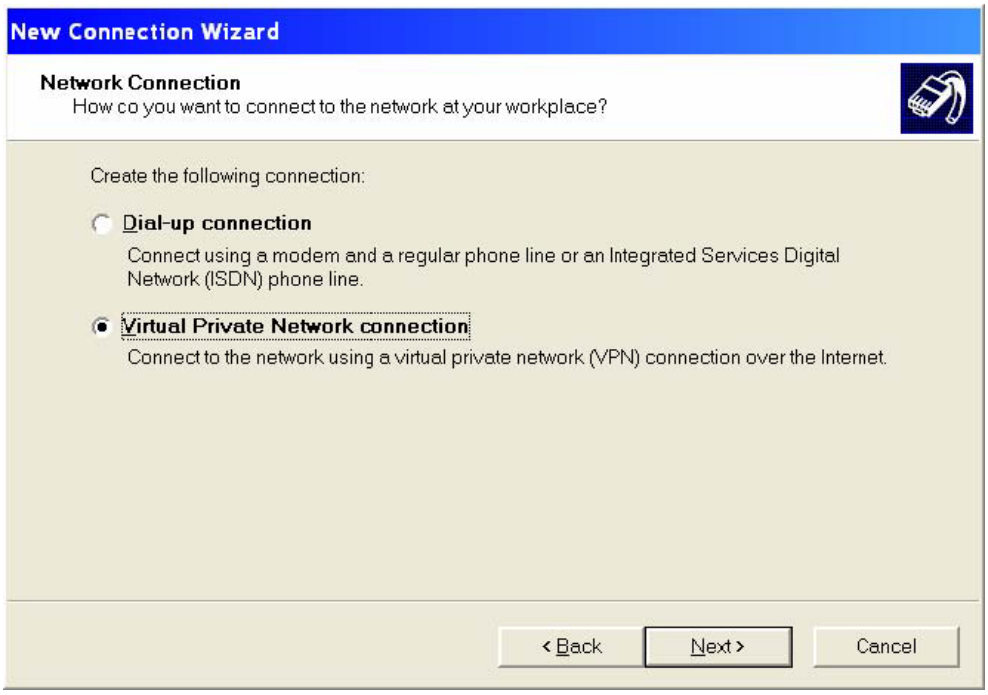
Click on "Create a new connection "


New Connection Wizard
Welcome to the New Connection Wizard
This wizard helps you:
Connect to the Internet.
Connect to a private network, such as your workplace network.
Set up a home or small office network
To continue, click Next.
< Back
Next >
Cancel

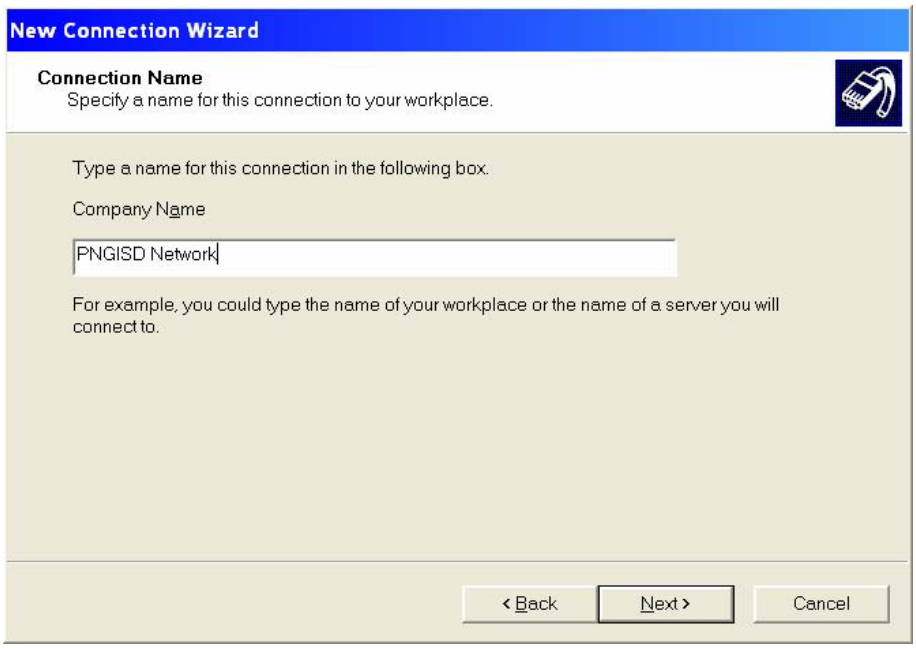
Select "Next"


New Connection Wizard
Network Connection Type
What do you want to do?
Connect to the Internet
Connect to the Internet so you can browse the Web and read email.
Connect to the network at my workplace
Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location.
Set up a home or small office network
Connect to an existing home or small office network or set up a new one.
Set up an advanced connection
Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.
< Back
Next >
Cancel

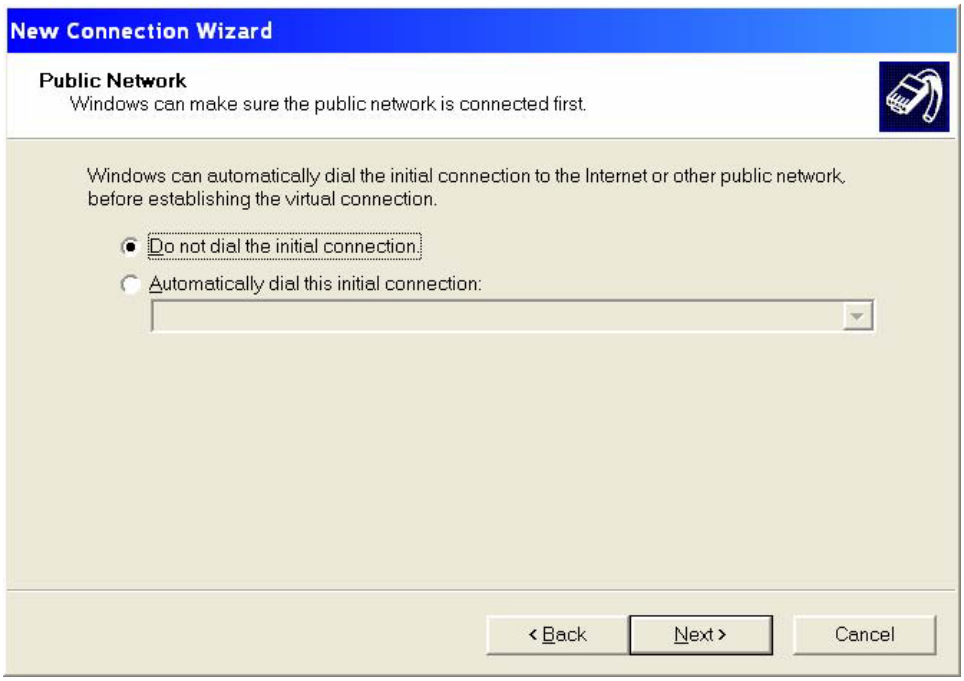
Select "Connect to the network at my workplace" Select "Next"


New Connection Wizard
Network Connection
How co you want to connect to the network at your workplace?
Create the following connection:
Dial-up connection
Connect using a modem and a regular phone line or an Integrated Services Digital Network (ISDN) phone line.
Virtual Private Network connection
Connect to the network using a virtual private network (VPN) connection over the Internet.
< Back
Next >
Cancel

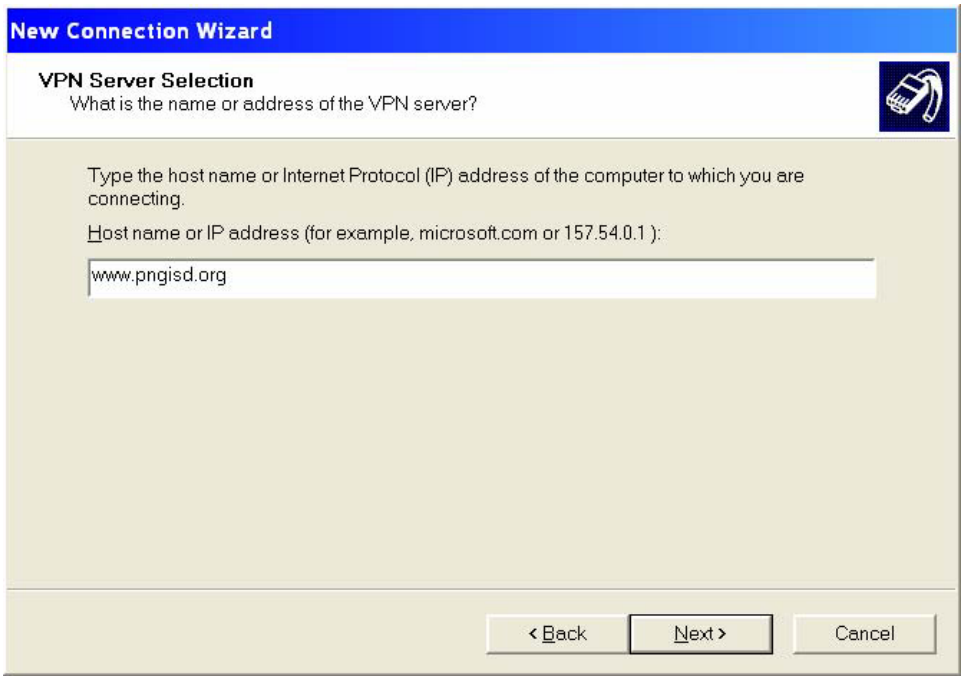
Select "Virtual Private Network connection" (VPN) Select "Next "


New Connection Wizard
Connection Name
Specify a name for this connection to your workplace.
Type a name for this connection in the following box.
Company Name
PNGISD Network
For example, you could type the name of your workplace or the name of a server you will connect to.
< Back
Next >
Cancel

Type in a descriptive name of your choosing Select "Next "
Depending on your existing setup, you may see the following window.


New Connection Wizard
Public Network
Windows can make sure the public network is connected first.
Windows can automatically dial the initial connection to the Internet or other public network, before establishing the virtual connection.
Do not dial the initial connection.
Automatically dial this initial connection:
< Back
Next >
Cancel

Select "Do not dial " Select "Next "


New Connection Wizard
VPN Server Selection
What is the name or address of the VPN server?
Type the host name or Internet Protocol (IP) address of the computer to which you are connecting.
Host name or IP address (for example, microsoft.com or 157.54.0.1):
www.pngisd.org
< Back
Next >
Cancel

Type in the address of the PNG network. In this case, it's www.pngisd.org
Select "Next "

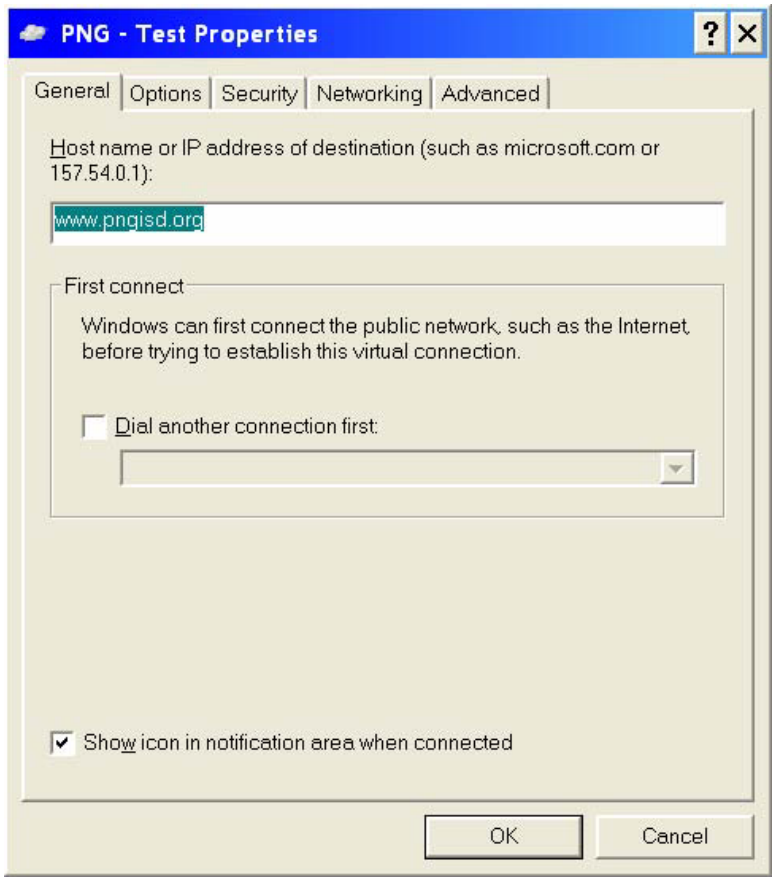
New Connection Wizard
Completing the New Connection Wizard
You have successfully completed the steps needed to create the following connection:
PNGISD Network
• Share with all users of this computer
The connection will be saved in the Network Connections folder.
Add a shortcut to this connection to my desktop
To create the connection and close this wizard, click Finish.
< Back
Finish
Cancel

If you want to place an icon on your desktop then check the box. Select "Finish"
As the name implies, you have "Finished" setting up the VPN connection.

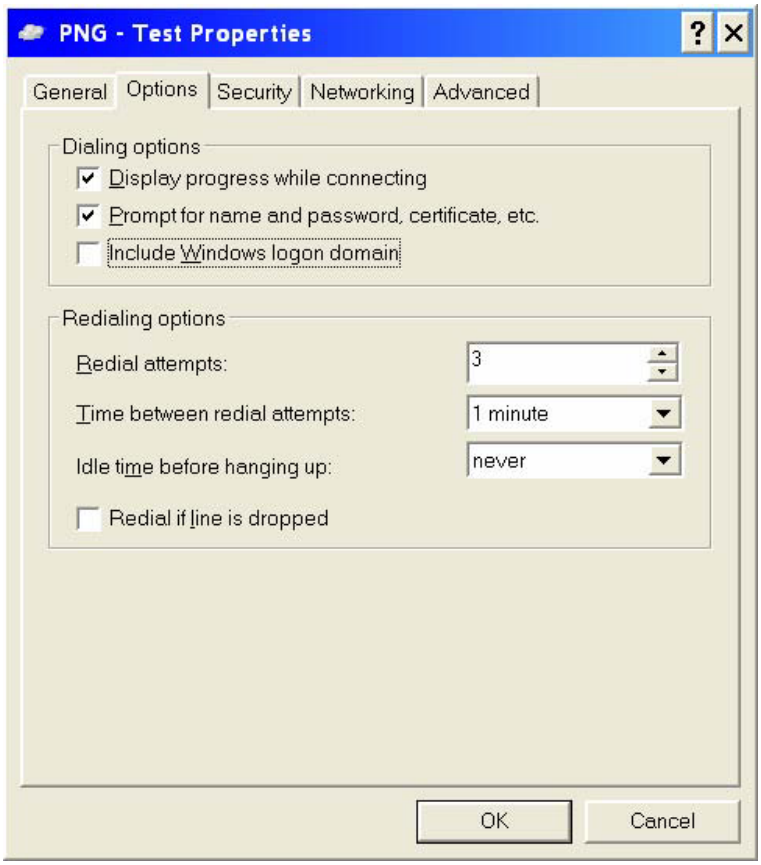
Logon Setup

Double click on the newly created network connection icon . You should see a window similar to the one below.

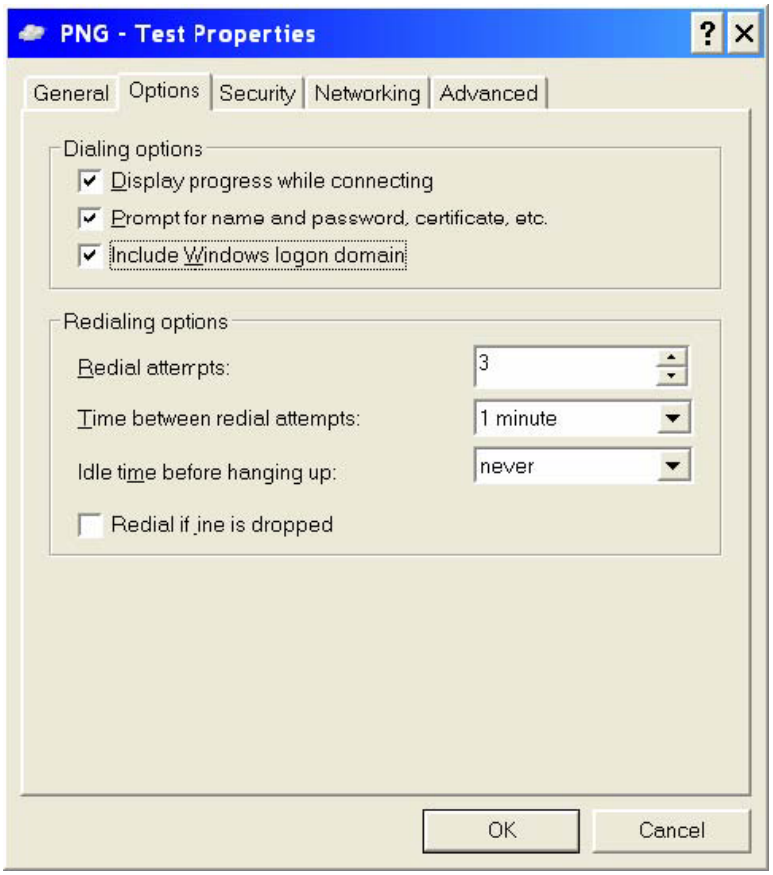
Select "Properties"
Select "Options"



Select "Options"



Click "Include Windows logon Domain"



Select "Ok"
You will be returned to this window

Type in YOUR PNGISD username and password, not the sample provided.
Make sure PNGISD is in the domain box, NOT PNGISD.ORG
If you wish to save the user name, check the box
Decide if you want these settings to be saved for just you, or everyone who uses the computer.

Once you have entered this information, all you need to do is select "Connect" to log on to the PNGISD network.

You will see the following two boxes popup in the center of your screen, one after the other

Then you will see this message in your TaskBar

At this point, you are fully connected to the PNGISD network

<u>What Can I Do Now? / How Do I Use This Thing?</u>

Ok, now that you're connected, nothing really looks any different. That's a good thing.
One of the things VPN allows you to do is to access data that you have stored on the PNGISD network from home. If you had access to the data from your school computer, you can now setup your home computer to access that same data. This will require that you change the way you do some things. You will need to start saving files that you normally place in your "My Documents" folder on your network drive instead. This is actually easier than you may think.
In the Microsoft applications, you can change the default location for the opening and saving of data files.

Change this to your network drive, usually H:, and you're done.

Microsoft Office is the software package used by PNGISD and the only one supported by the Technology Department. For help with anything else, you will need to read the user manual.

Practical Applications?

Some of you have teacher webpages. These can now be edited from home.
Some of you have to go through your student's folders and grade their work. This can be done from home.
Accelerated Reader / Star Reader / Star Math / can all be managed from home.
The Librarians can work from home.
Grade machine, if the data is on the network, can be maintained from home.
No more taking a floppy back and forth to work just to find out the thing can't be read by either system. (I hate floppies.)

If you can access the data from your desk, you can now access it from home as well.

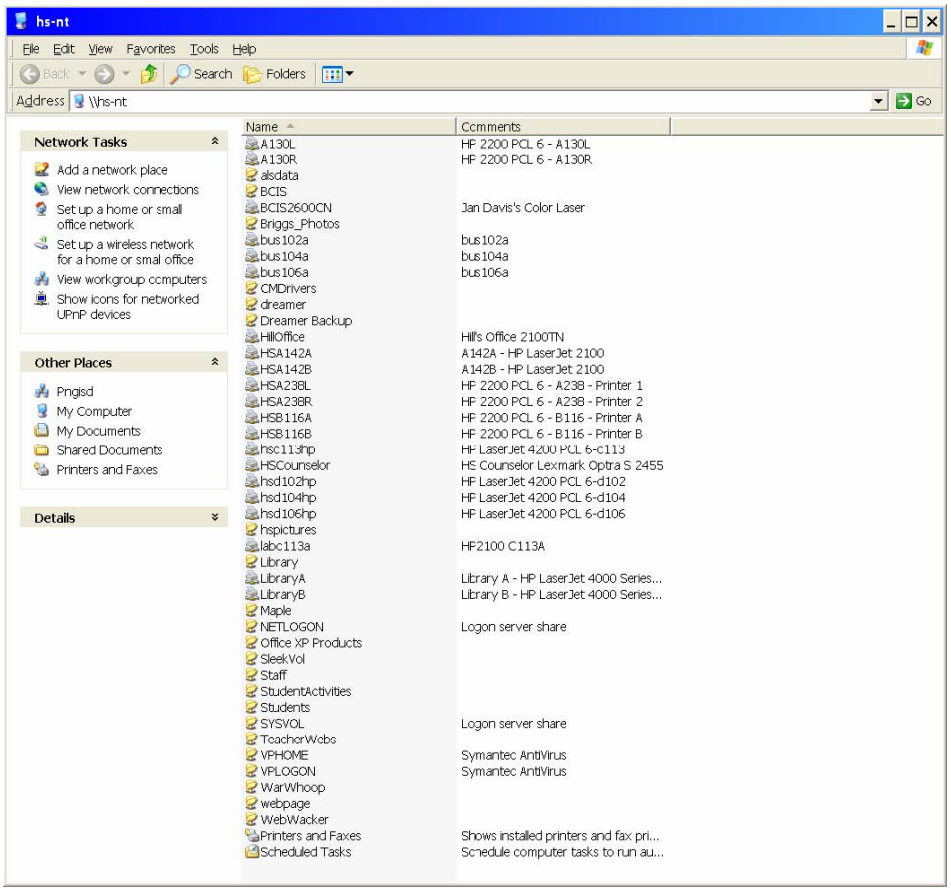
Now That It's Working, How Do I Use It?

Your VPN connection to PNGISD has been setup and tested. It works.

In order to access any of your data you are going to need to "Map" a drive.
This is a very simple process that can be done in any given number of ways. For the purpose of this document I am going to go over the easiest method.
Ok, the data you wish to access is in your user folder @ the High School. What you want to do is to map a shared resource on the high school server to your local computer. To do this, perform the following steps:

Start | Run | \\HS-NT.PNGISD.ORG { Press Enter }

A window similar to the one below will now open showing you the available printers and shared folders, just like you would see from your desk at work.



Right click on the "Staff "folder Choose "Map Network Drive"
Select an open drive letter.
That's all there is to it.

To access your data, open "My Computer", open the drive you just mapped and scroll down until you see your user folder. Double click on it to open it. Any files you copied there from work will be accessible to you.

Edit the file just like you would from work.
All this is based on the assumption that you have the appropriate software installed at home. For instance, if you wish to edit a Word document at home, you will have to have Word installed at home, no matter where the file is stored.

I'm Done, How Do I Stop This Thing?

You're finished, the project is done, and you want to "hang up". Before doing anything else, make sure that you have saved all your changes and closed any files that you had open from the VPN connection. To disconnect from the session, locate the connection icon in the taskbar or on the Desktop, right click on it and select "Disconnect".

Windows XP Home vs Windows XP Professional

The most important difference between the "Home" and "Professional" versions of Windows XP is the way it works within a network. As the name implies, the "Home" version is meant to be used in the home were network functionality is not a big issue. "Professional" was designed for the office and adds enhanced network functionality to Windows XP. "Home" users can still access networks, it just does so in a different manner.

How does that affect you? Ok, simple example.

At work you have WinXP Pro. You want to connect to a networked server. You would type \\server_name and press enter. A window would open showing you the available resources on that server.

You VPN into work from a computer running WinXP Home, you would have to append the DOMAIN name to the server name in order to connect.
\\server_name.domain_name

A small difference, but one works while the other will not.

Did This Thing Really Work?

As I stated before, once you've connected nothing appears to have changed. No new icon, no popup screens, nothing. It just sits there waiting.

The easiest / quickest way to see if anything has changed is to do the following.
Before connecting to the PNGISD network, open a CMD box.
(Start | Run | CMD { Press enter })
A black box will open.

In this box type the following "ping gms-nt" (not the quotes) and press enter It will sit there for a few seconds and tell you that it could not find gms-nt. And it shouldn't if you are at home because your home computer is not part of the PNGISD domain and has no way of determining what gms-nt is.

Now, connect to the PNGISD network using the new connection you just created. Try the command again (press the up arrow key and press enter). You should get a series of 4 responses. Your home computer is now "virtually" part of the PNGISD network and will be until you disconnect from the session.

If, after you have connected to the PNGISD network, you try to ping gms-nt and do not get the proper response, try to ping gms-nt.pngisd.org and see if it works.

Possible Problems

The above instructions have been tested, and for most users, will work without modifications.

One exception to this will be those users who have home networks that are being protected by a PHYSICAL hardware router/firewall that provides DHCP IP address assignment for your network.

One example of a hardware router/firewall would be the LinkSys Cable/DSL Router with 4-Port Switch. This particular device has one port on the back labeled "WAN " where your Cable/DSL modem will be plugged in and is the "PUBLIC " side of your home network's internet connection. This device handles the actual connection to your ISP and is assigned what the rest of the world sees as your "PUBLIC " IP address. So, anyone who might try to break in to your home computers would have to get through this device first. If you leave the default name/password unchanged on this device then breaking into your system would be fairly easy. All anyone need do is download the user manual from LinkSys and find out what the default name and password is. So, if you are using a device of this type, make sure that you change the default admin name and password.

This device has an additional 4 ports on the back that are available for you to plug in whatever network devices you desire. Printers, computers, wireless access points, whatever you can think up. By default, this device will listen for requests for an IP address from anything that is attached to these 4 ports.

This is what may cause you problems.

This device, and devices like it, will work fine for most home users as soon as you plug it in. In situations where the users of this network will be connecting to another network (VPN), the user will have to ensure that the settings of this device do not conflict with the settings of the network they are attempting to connect to.

Possible Solution

Devices of this type will generally issue IP address to devices attached to the local ports in the 192.168.1.x or 192.168.100.* ranges. Unfortunately, both of these address ranges are already used by the PNGISD network.
If your home network is using a network IP address that is in use by the PNGISD network, you may experience problems when trying to access network shares. If you should experience this situation, use the software that came with your device and change the IP range that it assigns addresses from. The following ranges are in use and should not be used if you plan on using VPN to access the PNGISD network.

192.168.1.* 192.168.2.* 192.168.11.* 192.168.12.*

192.168.13.*	192.168.14.*	192.168.20.*	192.168.30.*
192.168.40.*	192.168.50.*	192.168.60.*	192.168.70.*
192.168.80.*	192.168.90.*	192.168.100.*	192.168.110*

**** Notice ****

It is absolutely imperative that if you have a child at home who is a PN-G student, he or she is NOT allowed to access the network in any form or fashion! You, as the employee, are responsible to make sure that this does not happen. All connections are logged and are subject to review. Anyone caught abusing this privilege, either willingly or unknowingly (you leave it connected to the network and forget and later your child gets on the network), will have the privilege revoked.

When you connect to the PNGISD network via VPN connection, you may do so from any computer that has Internet access. This allows for very flexible access to your data, allowing you to transfer files to and from your remote site.

Windows XP introduced something called the "Remote Desktop Connection". What this does is allow you to log onto your desktop computer from another computer. When using this software to connect to your computer, you have complete access to your machine.

The software to CONNECT to a Windows XP computer is installed on both the XP Home and Professional versions.

Due to the fact that the PNGISD network is protected by a firewall, access to your work computer from home is very restricted.

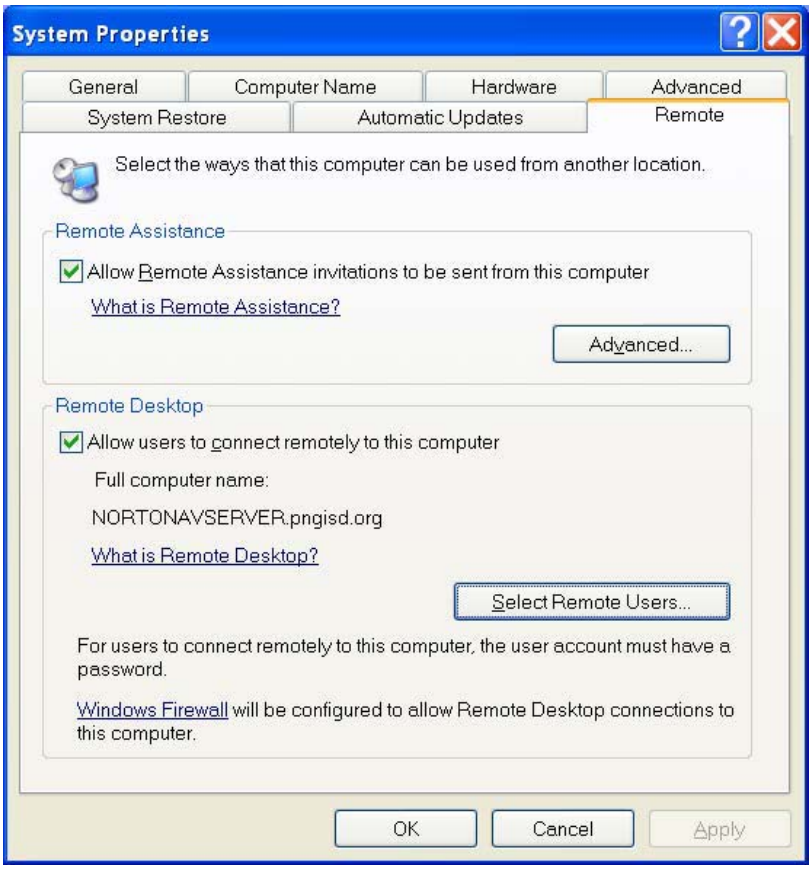
In order for you to be able to log on to your work desktop computer, several conditions have to be met.
1: You MUST request VPN access to the network.
2: You NEED a broadband (DSL/Cable) internet connection at home.
3: You have to leave your work computer turned on. (Turn off the monitor though)
4: Your work computer must be Windows XP Professional.
5: Remote Desktop must be enabled on your work computer.
6: You need to know the name of your work computer.

Ok, why, why, and why. Right?

The amount of data being sent between the two computers is substantial, the faster the connection, the better the experence. So, broadband is a must for this to be functional.
You have to leave your work computer turned on because you cannot connect to it if it is turned off.
Only Windows XP Pro has the Remote functionality built-in.
You need the name so you can specify which computer you wish to connect to.

Enable Remote Desktop

Perform the following steps to enable Remote Desktop on your work computer.
Right click on My Computer, left click on "Properties ".
Click on the tab labeled "Remote". In the middle of that window will be a checkbox that enables Remote Desktop. Make sure it is checked.



** Note ** While enabling this feature does allow others to connect to your work computer, access to your computer is controlled through the "Select Remote Users" button. Selecting this will open the windows below. Here you can select who you want to allow access to your computer.

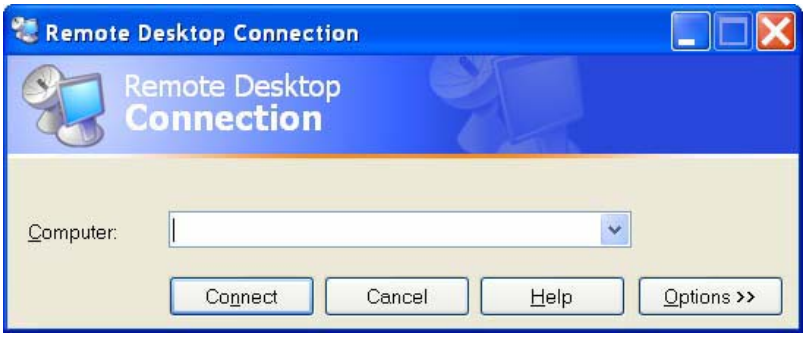
Remote Desktop Users
The users listed below can connect to this computer, and any members of the Administrators group can connect even if they are not listed.
PNGISD\rojohnson already has access.
Add...
Remove
To create new user accounts or add users to other groups, go to Control Panel and open User Accounts.
OK
Cancel

To find the name of your computer, click on the tab labeled "Computer Name" shown in the first picture.

Using Remote Desktop

On your home computer go to "Start | All Programs | Accessories | Communications | Remote Desktop Connection "

The box below will open



Type in the name of your computer. XP Home users be sure to add the ".pngisd.org" to this name. When the logon screen appears, type in the same username/password that you would use if you were at work. After you enter this information, you will presented with your normal desktop. Use the machine as you normally would.